

## ABSTRACT OF THE DISCLOSURE

A method of grouping cells in an integrated circuit design includes steps of: (a) receiving as input  
5 a representation of an integrated circuit design; (b) initializing a corresponding list of cells for a common signal domain in the integrated circuit design; (c) selecting a cell belonging to a common signal domain that is not included in a corresponding list of cells for a  
10 common signal domain; (d) tracing a net from an input port of the selected cell to a signal driver and inserting the selected cell in the corresponding list of cells for the common signal domain associated with the signal driver; and (e) tracing the net to an input port  
15 of each cell connected to the signal driver and inserting each cell traced from the net in the corresponding list of cells for the common signal domain associated with the signal driver.

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